

What is claimed is:

1. A method for transmitting data through a computer network, the computer network including a first computer and a second computer both having a message sequence number stored therein, the method comprising:

transmitting a message containing a message identifier, an encrypted message sequence number, and encrypted data from the first computer to the second computer;

decrypting the encrypted message sequence number to authenticate the identity of the sending party who transmitted the message; and,

when the identity of the sending party is authenticated, the second computer initiating transmission of the message sequence number and the encrypted data to a third computer.

2. The method of claim 1 wherein the message sequence number is incremented in both the first computer and the second computer for each subsequent message transmitted from the first computer to the second computer.

3. The method of claim 1 wherein the message sequence number is initialized as a randomly generated number in one of the first and second computers.

4. The method of claim 1 further comprising the step of decrypting the first encrypted data in the third computer using the message sequence number.

5. A computer network, comprising:
 - a first computer operably communicating with a second computer, both the first and second computers having a predetermined message sequence number stored therein;
 - a third computer operably communicating with the second computer;
 - the first computer configured to transmit a message containing a message identifier, an encrypted message sequence number, and encrypted data to the second computer, the second computer configured to decrypt the encrypted message sequence number to authenticate the identity of the sending party who transmitted the message, the second computer further configured to transmit the sequence number and the encrypted data to the third computer after the identity of the sending party is authenticated by the second computer.
6. The computer network of claim 5 wherein the message sequence number is incremented in both the first computer and the second computer for each subsequent message transmitted from the first computer to the second computer.
7. The computer network of claim 5 wherein the message sequence number is initialized as a randomly generated number in one of the first and second computers.
8. The computer network of claim 5 wherein the third computer is further configured to decrypt the encrypted data using the message sequence number.